

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/904,360	07/12/2001	Giuseppe Curello	Z&PINFP-08190	1413
24131 75	590 10/06/2005		EXAMINER	
LERNER AND GREENBERG, PA			ANYA, IGWE U	
P O BOX 2480 HOLLYWOOD, FL 33022-2480			ART UNIT	PAPER NUMBER
HOLLI WOOL	), IL 33022 2 100		2891	

DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

•			
	Application No.	Applicant(s)	iP
	09/904,360	CURELLO ET AL.	
Office Action Summary	Examiner	Art Unit	
	Igwe U. Anya	2891	
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet w	vith the correspondence addres	s
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUN 136(a). In no event, however, may a will apply and will expire SIX (6) MO e, cause the application to become A	ICATION.  The reply be timely filed  ONTHS from the mailing date of this communication (as N.S.C. § 133).	
Status			
<ul> <li>1) Responsive to communication(s) filed on 12 S</li> <li>2a) This action is FINAL. 2b) This</li> <li>3) Since this application is in condition for alloware closed in accordance with the practice under B</li> </ul>	s action is non-final. ince except for formal ma	• •	rits is
Disposition of Claims			
<ul> <li>4)  Claim(s) 1-4,6-12 and 14-21 is/are pending in 4a) Of the above claim(s) is/are withdra</li> <li>5)  Claim(s) 1,6-12 and 14-21 is/are allowed.</li> <li>6)  Claim(s) 2-4 is/are rejected.</li> <li>7)  Claim(s) is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or</li> </ul>	wn from consideration.		
Application Papers			
9) ☐ The specification is objected to by the Examine 10) ☐ The drawing(s) filed on 12 July 2001 is/are: a)  Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the Examine 11.	☑ accepted or b)☐ obje drawing(s) be held in abeya tion is required if the drawing	ance. See 37 CFR 1.85(a). g(s) is objected to. See 37 CFR 1.	
Priority under 35 U.S.C. § 119			
<ul> <li>12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority document</li> <li>2. Certified copies of the priority document</li> <li>3. Copies of the certified copies of the priority application from the International Bureat</li> <li>* See the attached detailed Office action for a list</li> </ul>	ts have been received.  Is have been received in a  Irity documents have been  It (PCT Rule 17.2(a)).	Application No n received in this National Stag	le
Attachment(s)  ) Notice of References Cited (PTO-892)  ) Notice of Draftsperson's Patent Drawing Review (PTO-948)  ) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Patent and Trademark Office	Paper No	Summary (PTO-413) (s)/Mail Date Informal Patent Application (PTO-152) 	

## **DETAILED ACTION**

Page 2

## Claim Rejections - 35 USC § 112

- 1. The following is a quotation of the first paragraph of 35 U.S.C. 112:
  - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 2. Claims 2 and dependent claims 3 and 4 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 2 recites an ion bombardment in addition to a rapid thermal anneal process (annexed form claim 1). The specification (page 20 lines 4 7, and figs. 1, 2) indicates an either or embodiment. Therefore, by setting forth both steps claim and its dependent s include new matter.

## Allowable Subject Matter

3. Applicant's claims 1, 6 - 12, and 14 - 21 are allowable, because prior art does not teach inter alia:

(claim 1) performing a rapid thermal anneal process, and subsequently carrying out a heat treatment step to produce an epitaxial layer and a buried oxide for a MOS transistor;

(claim 12) depositing a poly/amorphous layer by low pressure and low temperature CVD on a doped surface of a semiconductor substrate, and carrying out a

Art Unit: 2891

heat treatment step to produce an epitaxial layer and a buried oxide for a MOS transistor:

(claim 14) depositing a poly/amorphous layer to a thickness of 20 – 40 nm by LPCVD on a doped surface of a semiconductor substrate, and carrying out a heat treatment step to produce an epitaxial layer and a buried oxide for a MOS transistor; and

(claim 21) performing an ion bombardment or a rapid thermal anneal process to destroy an oxide present after an amorphous or polycrystalline deposition, and subsequently carrying out a heat treatment step to produce an epitaxial layer and a buried oxide for a MOS transistor.

- 4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Igwe U. Anya whose telephone number is (571) 272-1887. The examiner can normally be reached on M F 8:30am 5:00pm.
- 5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William B. Baumeister can be reached on (571) 272-1722. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 09/904,360 Page 4

Art Unit: 2891

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Igwe U. Anya Examiner Art Unit 2891

IA

October 3, 2005

B. WILLIAM BAUMEISTER
SUPERVISORY PATENT EXAMINED